

La résilience communautaire comme mesure de l'état de santé collectif : perspectives de communautés rurales

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La résilience communautaire est un cadre théorique utilisé pour décrire le processus que les communautés utilisent pour gérer l'adversité. Une étude de cas d'une durée de deux ans et s'appuyant sur une méthode mixte a été réalisée au sein de deux communautés rurales pour recueillir de l'information sur la résilience communautaire. Cet article se penche sur les thèmes issus des entrevues qualitatives réalisées auprès de 55 membres de ces collectivités. Les participants percevaient la communauté comme un lieu d'interdépendance et d'interaction. La majorité des répondants définissaient la résilience communautaire comme la capacité de gérer des défis. L'infrastructure physique et sociale, les caractéristiques de la population, les caractéristiques conceptuels et les processus de résolution de problèmes figuraient parmi les éléments qui sont ressortis, alors que les attitudes individuelles négatives et l'absence d'infrastructure dans les communautés rurales figuraient parmi les obstacles identifiés. Le personnel infirmier peut jouer un rôle important quant à l'amélioration de la résilience de ces collectivités, en élaborant et en mettant en œuvre des programmes axés sur le modèle de la résilience communautaire, présenté dans cette étude.

Mots clés : rural, résilience communautaire, communauté

Community Resiliency as a Measure of Collective Health Status: Perspectives from Rural Communities

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Community resiliency is a theoretical framework useful for describing the process used by communities to address adversity. A mixed-method 2-year case study was conducted to gather information about community resiliency in 2 rural communities. This article focuses on the themes generated from qualitative interviews with 55 members of these communities. The participants viewed community as a place of interdependence and interaction. The majority saw community resiliency as the ability to address challenges. Characteristics included physical and social infrastructure, population characteristics, conceptual characteristics, and problem-solving processes. Barriers included negative individual attitudes and lack of infrastructure in rural communities. Nurses could play a key role in enhancing the resiliency of rural communities by developing and implementing programs based on the Community Resiliency Model, which was supported in this study.

Keywords: rural, community resiliency, community, social processes, agricultural communities, mining communities

Community resiliency is one theoretical framework that is useful in explaining community responses to external forces such as economic downturns (Brown & Kulig, 1996/97; Kulig, 1999, 2000; Kulig & Hanson, 1996). By deepening our understanding of how communities view potential and actual threats and use problem-solving to address them, we will increase our overall understanding of the interplay between geographic setting and community resiliency. This article discusses the qualitative component of a mixed-methods case study conducted in two rural communities in the Canadian province of Alberta.

Literature Review

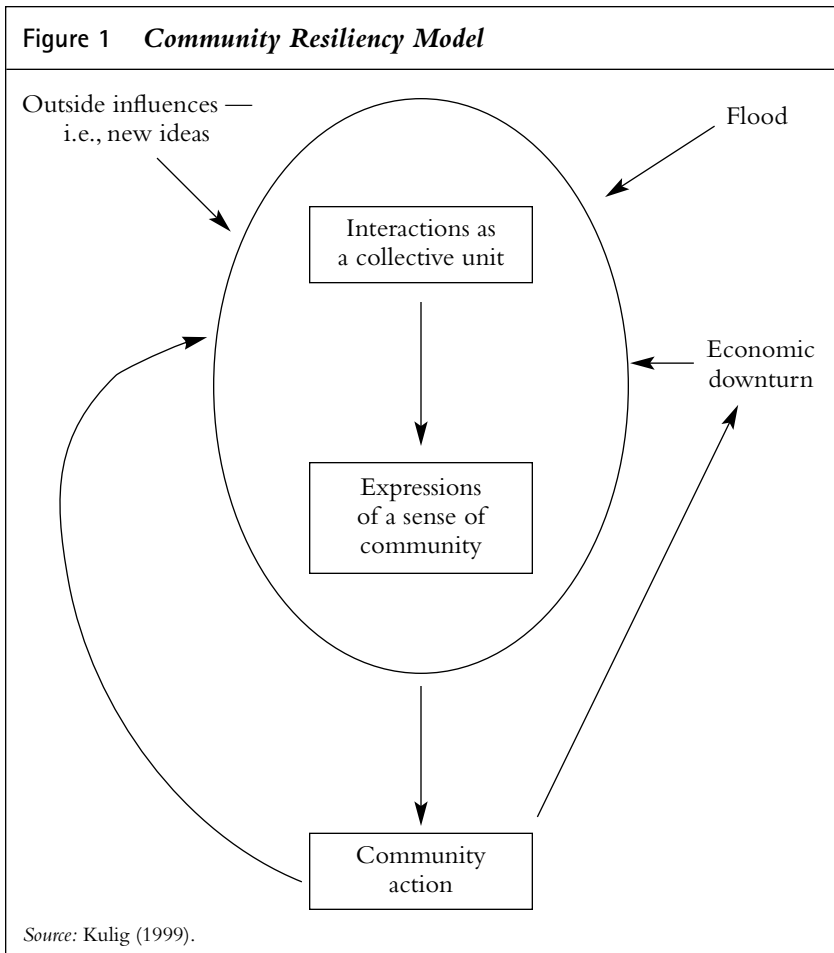
In this article, “rural” is defined as a community with a population under 10,000 that is outside the commuting zone of a large city (Mendelson & Bollman, 1999). A community is a place where interactions and social relationships are key (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1996; Hawe, 1994). Its primary function, according to MacMillan and Chavis (1986), is to satisfy the needs of its members through a process of “reinforcement.” In a community where everyone has a similar background,

people tend to identify with and strive towards common goals. Reinforcement therefore gives a community incentive to bond and express solidarity. The individual and the community are mutually reinforcing as they establish social norms to control behaviour and produce feelings of belonging and self-identity. Reinforcement ultimately promotes solidarity and a sense of security within the community (Huang & Stewart, 1996).

Community resiliency is the ability of a community not only to deal with adversity but to become stronger in spite of it (Brown & Kulig, 1996/97; Kulig, 1999, 2000; Kulig & Hanson, 1996). It is process-oriented, signifying that the community is constantly changing and may not always demonstrate an ability to meet challenges.

Breton (2001) notes that a neighbourhood's resiliency is dependent upon both physical and social capital, such as neighbour networks, social and physical infrastructure (e.g., health and social services), and local voluntary associations. Policies in the public and corporate sector also affect a neighbourhood's resiliency. Public celebrations such as fairs and festivals contribute to the viability and vitality of communities, and hence to their resiliency, by enhancing the sense of self, place, and community (Porter, 2000).

A series of interrelated studies has been conducted on community resiliency in an attempt to understand this concept from the perspective of rural residents collectively. Two studies were conducted in a former coal-mining town (Brown & Kulig, 1996/97; Kulig, 1996). Both concluded that resiliency is influenced by variables such as the presence of community leadership and proactive members and an ability to engage in community problem-solving. These variables contributed to community cohesiveness, a precursor to community resiliency. A subsequent study examined how the presence of community-based workers enhanced community resiliency (Kulig, 1998, 1999, 2000). This study led to the identification of a community-resiliency process (see Figure 1): the community experiences interactions as a collective unit, including "getting along" and "a sense of belonging"; this leads to the expression of a sense of community, exemplified by community togetherness and a shared mentality and outlook; consequently, community action occurs, as illustrated by the ability to cope with divisions and to deal with change in a positive way, the presence of visionary leadership, and the emergence of a community problem-solving process. Although the process of developing community resiliency is internal to the community, it is open to external influences such as new ideas. For example, economic changes can have consequences for the nature of community relationships and resiliency.



Other, related research also centres on resilient communities (Centre for Community Enterprise, 2000). Moreover, the literature focuses on individual rather than collective resiliency (Bell, 2001). Finally, little of this work features theoretical discussion about the concept of resiliency; instead, the work focuses on programs to help communities become more resilient (Centre for Community Enterprise, 2003).

Community resiliency promises to deepen our understanding of rural communities because the unique features of these communities challenge their ability to address adversity. For example, mining communities are associated with boom-and-bust cycles that economically impact on their ability to maintain and increase infrastructure. The extensive history of coal miners' strikes and general labour unrest has led to community orga-

nizing (Fisher, 1993; Giesen, 1995). Agricultural communities face similar challenges. The decline of the family farm (Bollman & Rothwell, 2002) and the increase in intensive livestock operations (ILOs) threaten the long-term sustainability of agriculture (Owen, Howard, & Waldron, 2000) and the rural lifestyle (Schiffman, Miller, Suggs, & Graham, 1995; Thu et al., 1997).

Qualitative Component of the Study

Purpose

One research question was addressed in the qualitative component of the mixed-method study: *What is the meaning of community resiliency for rural communities that are or may be undergoing economic change?*

Design

This article reports the findings from the qualitative interviews conducted in the two participating rural communities. The first was an agricultural community (population 743) that also has oil wells. The county in which it is situated (population 3,697) had defeated a proposed ILO through concerted community action. Interviews were also held in surrounding towns (populations ranging from 161 to 1,004) that would have been affected by the ILO (Statistics Canada, 2003). The second was a coal-mining community (population 9,405) that had experienced several mine closures, the most recent in 2003 (Statistics Canada, 2003). This community has always been dependent on resources such as minerals, oil, and lumber.

Data Collection and Analysis

Ethical clearance was obtained from the academic institution of the principal investigator (PI; the first author). Great care was taken to establish community engagement at both sites through a six-member advisory board (three members from each community). A public meeting was held in each community to describe the study, and follow-up public meetings were held to present the findings. The meetings were publicized through posters, advertisements in the local media, and word of mouth. The findings were also presented to health-care agencies, local governments, and key community stakeholders. The establishment of trust and rapport with the communities was considered crucial to the success of the study.

A project coordinator (the third author) was involved in all aspects of the study, including data collection and analysis. Local research assistants (RAs) and transcribers were hired to conduct the interviews and to make confidential transcriptions of the taped interviews. The PI trained the RAs with assistance from one of the co-investigators (the second author).

A total of 55 interviews were conducted — 30 in the agricultural community and 25 in the mining community. In each community, the RA, with the assistance of the advisory board, compiled a list of potential participants. The RA then approached the individual, described the study, and asked if he or she would be willing to take part. There were no refusals. After an interview date was set, the RA went to the participant's home, obtained informed consent, completed the demographic sheet, and conducted the interview. The interviews, which lasted more than 1 hour on average, were conducted over a 5-month period in 2003.

Data collection and analysis were conducted concurrently (Neuman, 2007). Tentative themes and categories were generated by the PI on the basis of the data and confirmed through axial coding, which assigned labels and made connections between themes (Neuman, 2007). Therefore, contextual issues such as the type and history of experiences of the two communities, gender of the participant, and community involvement by the participant were all considered and incorporated as appropriate.

An auditor served as an additional check of the data analysis. This individual was chosen for her expertise in both method (qualitative research) and content (community). The auditor provided a detailed analysis and commentary on three transcripts from each community. The PI did not read this material until after data analysis was completed. The auditor's comments confirmed the results of the data analysis conducted by the PI and the project coordinator, while enhancing the data-analysis process and helping to ensure rigour and trustworthiness.

Findings

A large proportion of the 55-member sample was female ($n = 29$), married ($n = 46$) with two children ($n = 26$), and with 13 to 16 years of education ($n = 30$). In addition, 24 participants were in the 35-to-49 age category, 34 had been born in a small town, 25 gave their ethnicity as "Canadian," and 27 indicated that they were Protestant. Regarding employment, 36 participants worked full time, nine worked part time, and 10 were either retired or currently not working.

The study has two limitations. The findings may be useful only for communities that are similar to the communities selected for the study, and the findings may be representative of these communities only at a given point in time.

Describing Community

All of the participants were asked to describe their experiences as members of the community. Overall, "community" was seen as a place

Table 1 Community Characteristics				
Infrastructure	Physical Attributes	Individual Characteristics	Population Characteristics	Conceptual Characteristics
Gathering places Resources and amenities	Physical location Terrain (natural, mountainous)	Diligence Entrepreneurialism Innovativeness	All age groups, religions, and socio-economic classes Followers, leaders, and participants Concern for others	Sense of community Sense of belonging Interdependence Sense of togetherness Warmth, openness, and friendliness Proactivity Inclusiveness Spirit of caring and cooperation Small-town spirit, pride, identity, and sense of well-being Spirit of optimism and confidence

where people lived and worked, and as characterized by interdependence and interaction among its members. Communities were also described as places with commonly held goals. One male participant from the agricultural community said, “A community is a group of people living and working together for the betterment of society, and hopefully to raise [children] in a proper moral manner and to educate their children and enjoy life.”

For some of the participants in the agricultural area, the word “community” had a certain fluidity. For example, some communities in this area had experienced school and church closures, which resulted in participants identifying their community as where their children attended school, where their mail was delivered, or where they socialized.

Almost all of the participants perceived that, in their respective community, they “fit in.” The exceptions were individuals who felt excluded from their community’s problem-solving processes and those who felt they belonged in some ways but not others — for instance, they might have fit in with young mothers because they had children the same age but had little contact with other groups due to the absence of shared interests. Several participants spoke about the importance of learning how to fit in, such as by being adaptable and finding out about the community. This view was expressed very well by a woman from the mining community:

Participant: I feel at home here, I guess because we do like small towns in the first place and know the expectations and whatever to fit in.

RA: What kind of expectations are there?

Participant: I think it’s an interesting mix of what I call rugged individualism and community spirit. I don’t find that people go out of their way to make you [feel] welcome, but you sort of find your way in and then you make those connections.

The participants portrayed their community as a desirable place to live, work, and raise a family. They focused on specific community characteristics (infrastructure, gathering places); individual characteristics (diligence, common goals); physical attributes (mountainous terrain); population characteristics (all age groups); and conceptual characteristics (pride, hope) (Table 1). Some of the concepts were more applicable to one or other of the two communities. For example, the participants from the agricultural community cited the importance of cooperation and interdependence to the survival of the community. These participants referred to population characteristics such as variety of age groups, whereas those from the mining community focused on individual characteristics such as diligence and entrepreneurship, with less emphasis on unity. One woman described the mining community succinctly:

The main feature that strikes me is how fragmented it is. People do things in isolation. It doesn't seem to occur to them — or if it does, it doesn't seem to interest them — to check out what else is happening that day. People do things in their own circles...it's very difficult to get the whole community motivated in one direction unless it's something like the train disaster, where just about everyone did something to help out.

The perceptions of the community and the levels of participation differed for the two sites. The differences may be related to four sets of community characteristics.

Differences in Community Type

In agricultural communities, it is common for farm families to help each other with planting and harvest. This spirit is magnified if there has been a tragedy or an unexpected event that prevents a family from performing the essential tasks on its land. Such interdependence and hard work were continually cited by the participants from the agricultural community.

Residents of the mining community were interdependent in some ways, but their level and type of commitment was different from that of the agricultural community. The mining community was described as a “mountain town” and as a “company town” that had been created because of its natural resources (coal and lumber). They saw its population as transient, primarily due to the cyclical nature of resource availability and market-driven demand for growth. Although the residents came from around the globe and learned to rely on one another in the absence of their extended families, the sense of attachment to the community was less evident than in the case of the agricultural community.

There were signs that the mining community was changing in this regard. Recent mine closures had not resulted in the mass departure of individuals and families. The participants spoke of the community having become their home and of their commitment to staying on. Some laid-off miners were considering other kinds of work so as to remain in the community, and town officials were encouraging this by providing information about local employment opportunities.

Demographic Differences

The second set of characteristics concerns the demographics of the community. The agricultural community was more homogeneous in terms of education, religious background, ethnicity, and length of time in the community. The population was stable, with only a few newcomers arriving from time to time, perhaps as a result of marrying into a farming family or securing work in the region in the oil industry. Recently, low-

income families had moved into the area, and concerns were raised because they were perceived as lacking social support and the resources needed to contribute to the community.

The mining community had routinely experienced population turnover and change since its founding. Compared to the group of participants from the agricultural community, this group contained a larger number of newcomers to the area. The perspectives of these participants tended to reflect a global context, with less emphasis on commitment to one community.

Differences in Problems/Challenges

The third set of characteristics relates to the nature of the challenges faced by the community. The participants from the agricultural community cited a variety of issues their community had addressed over the years, the proposed ILO being the most recent. The other group had difficulty listing issues they had addressed as a community, partly because of the nature of the community and the kind of people who live in a mining area. Most of the issues that this community had faced were beyond individual control (mine closures) and could not be altered even if the entire community were to organize to address them. Finally, due to the transient nature of the mining community's residents, experiences with community issues varied considerably among the participants.

Group Differences

The fourth set of characteristics pertains to the types of groups that made up each community. The agricultural community was the more demographically stable of the two. However, a number of comments by participants suggested the presence of distinct groups within the community: urban/rural, farm/town, county/community loyalty, established residents/newcomers. For example, some participants said that the town was considered urban because it had access to services not available to farm-dwellers. Participants also spoke of differences between farm and town living and how these ultimately played out in the different priorities of the two groups. One woman put it this way:

In this community there is maybe a bit of separation between town people and farm people...and a lot of community goals and things are more town-centred. Farm people are often — not forgotten, but not a priority issue for the community as a whole. ...the recreational facilities are town-based.

These perceived differences among groups are exemplified by statements indicating that some residents identified with the county while others were more attached to their local community. It was the opinion of some

participants that community sustainability depended upon a redefining of “community” to encompass the county and the placement of services and resources (e.g., arenas, retail services) to where they would benefit the most residents.

The mining community was also described as separated into groups. The participants spoke of old-timers/newcomers, bosses/workers, environmentalists/industrialists, and those who had never left the community versus those who had left to study and later returned. These divisions were partly based on the geography and history of the community, which resulted in the community being split into “hill” and “valley.” More newcomers lived on the hill than in the valley, which accentuated the various divisions. Like the agricultural community, the mining community had undergone population changes due to the cyclical nature of the resource industries that were its economic mainstay. This had led to the “newcomer” label for people who were transferred to the community as opposed to being born and bred there. The division between bosses and workers, meanwhile, was intertwined with the history of mining as a corporate entity and hard-won battles to create trade unions. One participant explained:

This is the leadership side of the union movement, the leadership side of the corporate mindset. Here, the leadership side of even the social systems...[is based on] very strong foundational beliefs and haven't been challenged very often to integrate, compared to many communities who haven't got those histories or the necessity to integrate themselves more. [However,] those things that polarize people at the organizational level tend not to do so at the local level. People get along on the operating level, and I want to be clear: the leaders...know they have to get along, and they do in certain ways, but the...institutions they represent are pretty dogmatic about their priorities.

The environmentalist/industrialist division was based on differences of opinion with respect to the extraction of natural resources.

Understanding Resiliency

A few of the 55 participants were unable to define “resiliency” without prompting. With prompting, almost all were able to do so. A very small number expressed a negative view of resiliency, describing it as “resistance.”

The majority of participants defined resiliency as the community’s demonstrated ability to address challenges. Phrases such as “bouncing back” and “carrying on” despite the odds were frequently used. “Resiliency is having the power to bounce back from a really bad situa-

tion,” said a woman from the mining community. “What would it look like? Well, it would look a little bit like a rubber band.”

Resiliency was seen as a positive characteristic that the community developed together through a variety of means, most of which were found right in the community. However, there was acknowledgement that some communities have ceased to exist because they lacked resiliency and therefore outlived their usefulness.

Characteristics of Resiliency

Table 2 shows the characteristics of resiliency as expressed by participants from both communities. Generally speaking, these characteristics focus on the *social processes* involved in developing resiliency and confirm the first two components of the Community Resiliency Model (interactions as a collective unit and sense of community).

The participants acknowledged that a diverse economy and a stable population are also essential to resiliency. They expressed the view that a sense of belonging and community pride are important conceptual characteristics of resiliency; that gathering places in the community enhance the ability of residents to come together; that social infrastructure, including commitment, social support, and stick-to-itiveness, are essential; and that personal characteristics, including open-mindedness, orientation towards the future, and willingness to change, are also imperative for community resiliency.

Another aspect that was seen by participants from both communities as essential to resiliency was proactivity. Reactive communities were perceived as those that are unprepared for what lies ahead. Community champions were seen as central to community resiliency because they demonstrate vision and provide the stimulus for the community to show its proactivity by taking risks and accepting challenges. Transparency in decision-making was viewed as essential, as was access to resources, including knowledge. Finally, the participants saw a supportive community-elected local council as imperative for resiliency.

However, the two communities differed in terms of what they considered important in the process of developing resiliency. The residents of the mining community viewed community as a collection of individuals who must be proactive and address problems together. Furthermore, these residents believed that community resiliency can be created from a combination of individual traits such as orientation towards the future and community pride. Residents of the agricultural community, in contrast, seemed to take for granted such notions as “community,” “working together,” and “the need for leadership.” This community did not have to work as hard to function as a community; it simply operated as it always

Table 2 Characteristics of Community Resiliency

Infrastructure Characteristics	Social Infrastructure	Population Characteristics	Conceptual Characteristics	Problem-Solving Processes
Diverse economy Gathering places Common goals	Social support Commitment Pride Stick-to-itiveness	Open-mindedness Flexibility Honesty Positive attitude Future orientation Willingness to change Presence of visionary leaders Accessibility of resources and knowledge Ability to act independently	Proactivity Creativity Ability to use networks Sense of togetherness and community Community pride	Transparent, collective decision-making process Supportive, community-elected council

had, in part because of the stability of the population and the strength of the ties binding the residents together.

The mining community cited the importance of leaders to the process of developing resiliency. Participants felt that without community champions, issues would not be addressed. However, it would have to be the “right” kind of leader: effective leaders have vision, commitment, and the charisma needed to convince members of the community to follow them. A male participant from the mining community defined leaders as “people with vision and the ability to realize that vision — and they’re hard to get: you may have the visionaries, but they can’t act; you may have the doers who don’t have a vision.”

Regardless of the community, togetherness, attachment to community, and the “right attitude” were all seen as essential for resiliency.

Barriers to Resiliency

Challenging events such as loss of industry or a succession of negative occurrences were identified as barriers to resiliency (Table 3). Participants from the agricultural community indicated that specific characteristics among the residents often formed barriers, whereas in the mining community the lack of volunteers and the lack of participation in community issues were seen as strong barriers.

Both groups of participants cited infrastructure as a potential barrier. For those from the agricultural community, one infrastructure barrier was the government’s removal of residents’ freedom to choose — a view that could be related to their recent experiences with the proposed ILO. Attitudinal characteristics were noted as potential barriers in both communities but were particularly significant for participants from the mining community. For example, members of this group mentioned apathetic citizens who did not contribute to the community and therefore decreased its resiliency. “Most things in life come down to attitude — just the way you look at things,” said a man from the mining community. “I think if you have a negative attitude, then you’re not going to bounce back.”

Displaying Resiliency

Almost all of the participants believed that their community displayed resiliency. The exceptions were those who felt that their community was in the process of healing (e.g., from the ILO issue) or had yet to demonstrate resiliency (e.g., by dealing with the mine closures). The mining community was perceived as resilient because the population had remained stable despite the recent closures. The agricultural community’s successful community action was given as an example of resiliency. Other ways in which communities displayed resiliency was by honouring their

Table 3 Barriers to Resiliency					
Challenging Events	Infrastructure Characteristics	Social Infrastructure	Population Infrastructure	Conceptual Infrastructure	Attitudinal Characteristics
<p>Succession of negative events</p> <p>Sudden or unexpected events (e.g., natural disasters)</p> <p>Loss of industry</p>	<p>Economics</p> <p>Lack of health services and postsecondary education</p> <p>Prevalence of shift work</p> <p>Age and gender biases</p> <p>Geographical isolation</p> <p>Lack of support from council</p> <p>Disempowerment</p>	<p>High crime rate, particularly in combination with lack of community spirit and lack of communication</p>	<p>Lack of knowledge and education</p> <p>Lack of vision</p> <p>Lack of communication</p> <p>Low self-esteem</p> <p>Low rates of participation</p> <p>Lack of leadership</p> <p>Lack of caring</p> <p>Convergent thinking</p>	<p>Failure to be proactive</p>	<p>Lack of belief in the community</p> <p>Complacency</p> <p>Negativity</p> <p>Apathy</p> <p>Insularity</p> <p>Individualism</p> <p>Powerlessness</p> <p>Jealousy</p> <p>Ignorance</p> <p>Prejudice</p> <p>Fear of change</p> <p>Intolerance</p> <p>Unwillingness to develop partnerships</p> <p>Rigidity</p>

history, hosting regular events and activities, and continually making changes and improvements, which entailed five steps: (1) acknowledging the problem, (2) sharing information and communicating with the larger community, (3) selecting a group to address the issue, (4) generating solutions, and (5) accepting and implementing the solutions. When asked how individuals could contribute to community resiliency, the participants identified having the right attitude, having community pride and spirit, working together for the greater good, sharing one's talents, and forming partnerships.

Discussion

The participants in this study perceived their communities as collective units of interaction that were dependent on individual behaviours. They believed that individual attributes such as interdependence and willingness to address common goals lead to a collective sense of community. To them, "rural" was defined not only by population size or physical location but also by subjective experience. The participants gave examples of how close relationships and ways of interacting were important in defining "rural." Their descriptions of community are supported by the literature, which discusses communities as having social and relational characteristics (Bellah, et al., 1996; Howe, 1994). Geographical aspects of community are vital, but given the nature of rural communities, particularly agricultural ones, residents must create community based on social relationships rather than physical location.

All of the participants treated resiliency as the ability of their communities to move on despite the challenges they were facing or had faced. The development of community resiliency was described as a proactive process based on infrastructure, population characteristics, social infrastructure, conceptual characteristics, and problem-solving. Visionary leaders and community residents who have the right attitude and who engage in collective problem-solving were seen as crucial to this process. The participants believed that their community's rural base and its dependence on natural resources were potential barriers to its resiliency.

The above findings fit with the Community Resiliency Model, which centres on the interactions of the community as a collective unit, creation of a sense of community, and community action founded on proactive problem-solving (Kulig 1998, 1999, 2000). For example, concepts such as sense of togetherness and sense of community are apparent in both the present findings and the model. In addition, individuals with a positive attitude and common goals will have a shared vision of their community. Finally, being proactive, having visionary leaders, and engaging in collective problem-solving were also noted.

The findings also suggest a relationship between being rural, experiencing economic hardship, and resiliency. Natural resource communities such as those represented in this study are facing economic downturns (mine closures) and the possibility of new industries (such as ILOs) moving in. Threats to rural sustainability can be addressed by applying the three components of the Community Resiliency Model. Social interaction can be reinforced by ensuring the availability of gathering places such as schools and community halls. Inclusive activities like parades and rodeos are also important, because they offer opportunities for social interaction and collaboration. Economic instability and the closure of facilities such as schools and churches can threaten not only the community's resiliency but its very survival.

Community action can be supported through forums for leaders from rural communities that have demonstrated resiliency to share their experiences with communities that are similar. Such initiatives would be enhanced by leadership workshops, mentoring programs, and the like. Health and social service personnel such as nurses and social workers could play a significant role in developing and implementing initiatives like these, thereby contributing to community resiliency and rural sustainability.

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Authors' Note

A heartfelt thank you is extended to all those who were interviewed or completed the surveys; to advisory board members Darlene Albrecht, Merv Bashforth, Lana Love, Jim Matthews, Fred Munn, and Yvonne Oshanyk; to research assistants Nanette Jones, Lisa Land, and Jennifer Van Royan and transcribers Denise Gamroth, Kate Wright, Michelle Weiss Mess, and Sandra Ladwig; to Sylvia Wilson, Yan Jin, Kir Luong, Nicole Mack, and Murray McKay of the Evidence and Research Branch, Alberta Health and Wellness; to Karen Houweling, Chinook Research Summer Award; to undergraduate research assistants Tanya Hossli and Stacey Lutes and graduate research assistants Carol Sui and Bill Alles; and to Brenda Nixon, secretary, Mary W. Walters, editor, and Gretchen Barnhill, proofreader. Without the contributions of these individuals, the study could not have been completed.

We are grateful for the generous funding of the Canadian Institutes of Health Research, which supported this endeavour through its strategic initiative Building Healthy Communities through Rural and Northern Health Research. A faculty release grant from the Canadian Centre for Health and Safety in Agriculture provided the first author with the time needed to prepare this article.

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